

OPINIONS AND DECLARATIONS RENDERED BY THE INTER- NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

Secretary to the Commission

VOLUME 1. Part 22. Pp. 207-234, 2 plates.

OPINION 13

The specific name of the Sand Crab

LONDON :

Printed by Order of the International Commission on
Zoological Nomenclature
and

Sold on their behalf by the International Trust for Zoological
Nomenclature at the Publications Office of the Trust
41, Queen's Gate, London, S.W.7

1947

Price six shillings and eleven pence

(All rights reserved)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION OF THE COMMISSION AT THE TIME OF THE ADOPTION OF *OPINION 13*

The Officers of the Commission

President : Professor Raphael Blanchard (France).

Executive Secretary : Dr. Charles Wardell Stiles (U.S.A.).

Recording Secretary : Professor F. C. von Maehrenthal (Germany).

The Members of the Commission

Class 1910

Monsieur le Professeur Raphael BLANCHARD (France) (*President of the Commission*).

Monsieur le Professeur L. JOUBIN (France).

Dr. Charles Wardell STILES (U.S.A.) (*Executive Secretary to the Commission*).

Dr. Th. STUDER (Switzerland).

Professor R. Ramsay WRIGHT (Canada).

Class 1913

Monsieur le Professeur Ph. DAUTZENBERG (France).

Professor William Evan HOYLE (United Kingdom).

Dr. L. von GRAFF (Austria-Hungary).

Professor F. C. von MAEHRENTHAL (Germany) (*Recording Secretary to the Commission*).

Professor F. OSBORN (U.S.A.).

Class 1916

Dr. F. A. JENTINK (Netherlands).

Professor David Starr JORDAN (U.S.A.).

Professor F. S. MONTICELLI (Italy).

Herr Geheimrat Dr. F. E. SCHULZE (Germany).

Dr. Leonhard STEJNEGER (U.S.A.).



OPINION 13.

THE SPECIFIC NAME OF THE SAND CRAB.

SUMMARY.—Catesby's (1743) pre-Linnean¹ name *Cancer*¹ *arenarius* is not available under the Code, although "reprinted" in 1771;² *Cancer quadratus* Fabricius, 1787,³ is stated to be preoccupied; *Ocypoda albicans* Bosc, [1801-1802]⁴ being the next specific name in the list, becomes valid, under the premises submitted.

[**IMPORTANT NOTICE :** The premises on which the second sentence of the "summary" of this *Opinion* is based are incorrect and in consequence the conclusion indicated in the third sentence is also incorrect. See **NOTES 5-8** below (pp. 216-232). It is proposed, therefore, to re-submit this case to the International Commission on Zoological Nomenclature as soon as possible.

(signed) Francis Hemming, Secretary to the Commission.]

I.—THE STATEMENT OF THE CASE.

Miss Mary J. Rathbun has submitted the following case to the Commission for *Opinion* :—

SHALL THE SAND CRAB BE KNOWN UNDER THE SPECIFIC NAME
*OCYPODA ALBICANS*⁴?

In Catesby's *Nat. Hist. Carolina*, vol. 2 pl. 35 (1743), we find the first

¹ See NOTE 2 below (p. 213). When this *Opinion* was published in 1910, the generic name used for this species by Catesby was inadvertently omitted.

² See NOTE 3 below (pp. 213-215).

³ *Cancer quadratus* Fabricius, 1787, *Mantissa Ins.* 1 : 315. (When this *Opinion* was published in 1910, the date here cited was 1793, the reference being to Fabricius, 1793, *Ent. syst.* 2 : 439, but (as here shown) that was not the first occasion on which Fabricius applied this name to this species. On the same occasion the generic name of this species was inadvertently omitted.)

⁴ *Ocypoda albicans* Bosc, [1801-1802], (Castel's Buffon) *Crust.* 1 : 196. This volume is dated "An X," which ran from September 1801-September 1802 (see Griffin, 1939, *J. Soc. Bibl. nat. Hist.* 1 : 249). As this date is

reference to the crab which was later described by Bosc, 1802,⁵ as *Ocypoda albicans*.

Catesby mentions it under the descriptive title "*Cancer arenarius*. The Sand Crab. Le Cancre de Sable." In this work descriptive names are used which are mostly polynomial, but occasionally are binomial, as *Avis tropicorum* (Appendix p. 14) and *Monedula tota nigra* (Appendix p. 3). They are always Latin translations of his vernacular English and French names. In 1771, this work was reprinted *verbatim* with new type, the same descriptive names being used as in 1743. On the title page, however, appears the following: "Revised by Mr. Edwards, of the Royal College of Physicians, London. To the whole is now added a Linnaean Index of the Animals and Plants." In the Linnaean Index, Edwards applies to Catesby's "*Cancer arenarius*. The Sand Crab" the name "*Cancer vocans* L." ⁶

A copy of the Crustacea from Edwards' list is given below. The list is headed as follows:—

A Catalogue of the Animals and Plants represented in Catesby's Natural History of Carolina: With the Linnaean Names. Vol. 2.

- | | |
|---|--|
| 32. The Land-Crab. <i>Cancer terrestris</i> ,
<i>cuniculos sub terra agens</i> . Hist. Jam.
I. t. 2 | <i>Cancer ruricola</i> L. |
| 33. The Hermit-Crab. <i>Cancellus terrestris</i> Bahamensis.
The same in a shell. | <i>Cancer Diogenes</i> L.
Idem in <i>Buccino petholato</i> L. |
| 34. The Sea Hermit-Crab. <i>Cancellus maximus Bahamensis</i> . | An <i>Cancr</i> i <i>Diogenis</i> L.
varietas? |
| 35. The Sand-Crab. <i>Cancer arenarius</i> . | <i>Cancer vocans</i> L. |
| 36. The red-mottled Rock-Crab. <i>Pagurus maculatus</i> .
The rough shelled Crab. <i>Cancer chelis</i> <i>crassissimis</i> . | <i>Cancer grapsus</i> L.
<i>Cancer granulatus</i> L. |
| 37. The red clawed Crab. <i>Cancer marinus chelis rubris</i> . | <i>Cancer erythropus</i> Forst.
N. Am. Anim. 33. |

In an article by Professor Verrill (1908, *Trans. Conn. Acad. Arts Sci.* 13: 299-474), a page of which (: 306) is appended, he has fallen into error in his statement of the case. The footnote leads one to suppose that Edwards in his binomial list applied the name "*Cancer arenarius*" to the crab in question.

(Extract from page 306 of vol. 13 of the *Transactions of the Connecticut Academy of Arts and Sciences*)

Family OCYPODIDAE Leach.

Ocypode arenarius (G. Edw.) Say. *Ghost-Crab*; *Sprite*; *Beach Crab*.

Cancer arenarius Edwards in Catesby, *Nat. Hist. Carolina* II, pl. 35, 1771.

Cancer quadratus J. C. Fabricius, *Entomologia Systematica*, II, p. 439, 1793. ("Habitat in Jamaica Mus. Dom. Banks.")

obtained from a source other than the original publication it should be cited in square brackets: "[1801-1802]." (When this *Opinion* was published in 1910, the date for this name was given as 1802. On the same occasion, the generic name of this species was inadvertently omitted.)

⁵ See footnote 4.

⁶ *Cancer vocans* Linnaeus, 1758, *Syst. Nat.* (ed. 10) 1: 626.

- Ocypode quadrata* J. C. Fabricius, Suppl. Entomol. System., p. 347, 1798.
 S. I. Smith, Trans. Conn. Acad. Sci. IV, p. 257, 1880 (Synonymy and distr.)
Ocypoda albicans Bosc, Hist. nat. Crust. I, p. 196 (not the fig.) (Carolina coast).
Ocypode arenarius Say, Jour. Acad. Nat. Sci. Philadelphia I, p. 69, 1817.
 M.-Edwards, Hist. nat. Crust. II, p. 44, pl. 19, figs. 13, 14, 1837 (*Ocypoda arenaria*);
 Coues, Proc. Acad. Nat. Sci. Philadelphia, 1871, pl. 122 (*arenaria*; North Carolina, habits).
 Smith, Amer. Jour. Sci. (3), VI, p. 67, 1873 (*Monolepis inermis* = megalops-stage);
 Inverteb. Vineyard Sd., Report U.S. Fish Comm., I, p. 545 (251), 534 (240), 1874 (*Ocypoda arenaria*).
 Kingsley, Proc. Acad. Nat. Sci. Philadelphia, 1878, p. 322 (7), (*Ocypoda arenaria*);
 op. cit., for 1879, p. 400; op. cit., 1880, p. 184.* Rankin, Crust. Bermuda Is., p. 525, 1900.
Ocypoda rhombea M.-Edwards, Hist. nat. Crust., II, p. 46, 1837 ("Antilles et Brésil");
 Ann. Sci. nat., III, xviii, p. 143 (107), 1852 (*Ocypode*).
 Dana, U.S. Expl. Exped., Crust., p. 322, pl. 19, fig. 8, 1852 (Brazil).
Monolepis inermis Say, Jour. Acad. Nat. Sci. Philadelphia, I, p. 157, 1817 (megalops-stage).
Ocypode albicans M. J. Rathbun, Results Branner-Agassiz Exp. Brazil, Proc. Wash. Acad. Sci., II, p. 134, 1900; Brachy. and Macr. Porto Rico, p. 6, 1901 (descr.); Amer. Naturalist, XXXIV, p. 585, figs. 1, 2, 1900.

.

II.—DISCUSSION OF THE CASE.

2. Under the premises, as submitted, Catesby's name *Cancer arenarius*, 1743, is excluded under Article 29, which provides that: "The date 1758, therefore, is accepted as the starting point of zoological nomenclature and of the Law of Priority."⁸

3. Professor Verrill (1908 : 306 footnote) raises the point that in the 1771 edition⁹ of Catesby: "The name *Cancer arenarius* is given in the text and is also engraved on the plate."

4. The Secretary of the Commission has examined the work in question, and in his judgment the references in question are *reprints*, without any evidence that Edwards, the reviser, added his authority to this name. On the contrary, Edwards "added a Linnaean Index of the Animals and Plants." This index, which the Secretary has examined, does not support the interpretation drawn by Professor Verrill.

5. The new (1771) edition of Catesby⁹ does not therefore give

* Kingsley, op. cit., p. 184, used the specific name *arenaria*,⁷ as from Catesby, 1731 and 1771, dating it from the later edition. That edition was edited by George Edwards, who gave binomial names to the species of Catesby. There is no valid reason for not adopting them when they have priority, as in this case. The name *Cancer arenarius* is given in the text and is also engraved on the plate.

⁷ The expression "specific name" is here loosely used as the equivalent of the expression "trivial name," which would have been the correct expression to employ in this context. See NOTE 4 to *Opinion 1* (pp. 78-79 above).

⁸ See NOTE 4 below (pp. 216-217), where it is explained that the portion of Article 26, here quoted, has since been modified slightly by the International Congress of Zoology.

⁹ See NOTE 3 below (pp. 213-215).

this name availability; see *Opinion* 5.¹⁰ "Status of certain pre-Linnean names reprinted subsequent to 1757."¹¹

6. Linnaeus (1758, *Syst. Nat.* (ed. 10) 1: 626) cites "*Cancer arenarius*. Catesb. car. 2. t. 25" (apparently misprint for 35) as specifically identical with "Rumph. mus. 10. t. 14. f. E." under *Cancer vocans*, giving "Habitat in Indiis."

7. Under the premise that this citation forms an erroneous determination (see Article 31), we must look for the next mention of the animal. This, according to Professor Verrill (1908: 306) is "*Cancer quadratus* Fabricius"^{12, 13} which, according to Miss Rathbun, is preoccupied, hence is not available. *Ocyroda albicans* Bosc, [1801-1802],^{5, 13} is the next name which, according to the premises submitted, comes into consideration, and no point against the availability of *Ocyroda albicans* Bosc¹³ is raised either by Professor Verrill or by Miss Rathbun.

8. On basis of the foregoing premises, *Ocyroda albicans* Bosc,¹³ would be the valid specific name for "The Sand Crab," as figured by Catesby, 1743, and 1771, pl. 35.

9. *Opinion* written by Stiles.

10. *Opinion* concurred in by twelve (12) Commissioners: Blanchard, Graff, Hoyle, Jentink, Jordan,¹⁴ Joubin, Monticelli, Maehrenthal, Schulze, Stejneger, Stiles, Wright.

11. Not voting, three (3) Commissioners: Dautzenberg, Osborn, Studer.

Editorial Notes by Francis Hemming, Secretary to the International Commission on Zoological Nomenclature.

NOTE I.

Historical particulars.

This *Opinion* was published in July 1910 (*Smithsonian Institution* 1938: 22-24), when the Smithsonian Institution first undertook to publish the *Opinions* rendered by the International Commission on Zoological Nomenclature.

¹⁰ See pp. 115-126 of the present volume.

¹¹ When this *Opinion* was published in 1910, the date at this point was inadvertently given as "1758" instead of as "1757."

¹² See footnote 3.

¹³ When this *Opinion* was published in 1910, the generic name of this species was inadvertently omitted.

¹⁴ The Commissioner here referred to is the late Commissioner David Starr Jordan not Commissioner Karl Jordan, the present President of the Commission, who at the time of the adoption of *Opinion* 13 was not a member of the Commission.

2. This *Opinion* is undated but it cannot have been adopted earlier than on some date in 1908 (the earliest date on which the earlier *Opinion* 6 can have been adopted ¹⁵) or later than on some date in the first half of 1910, since (as shown above) it was published in July of that year.

3. For the reasons explained in paragraph 4 of NOTE 1 to *Opinion* 6,¹⁶ no manuscript or other unpublished documents relating to this *Opinion* are preserved in the archives of the International Commission on Zoological Nomenclature.

NOTE 2.

On the use of the expression "pre-Linnean" in Opinion 13.

In the "summary" of the present *Opinion* reference is made to the name *Cancer arenarius* published by Catesby (M.) in his *Natural History of Carolina, Florida and the Bahama Islands*; that name is there stated to have been published in 1743 and is called "pre-Linnean."

2. In applying the expression "pre-Linnean" to this name, the International Commission on Zoological Nomenclature used the same terminology as that which they had employed in *Opinion* 5. In the "summary" of *Opinion* 5, the Commission made it clear that they were there using the expression "pre-Linnean" as though it were the exact equivalent of the expression "pre-1758," since the meaning which it was intended to convey was that the name in question was published before the publication in 1758 of the 10th edition of Linnaeus's *Systema Naturae*. See NOTE 3 to *Opinion* 5.¹⁷

NOTE 3.

On the relation of Opinion 89 to Opinion 13 as respects the edition of Catesby (M.), Natural History of Carolina, published by Edwards (G.) in 1771.

The status of names originally published in or before 1757 and republished in or after 1758 is discussed in *Opinion* 5,¹⁸ where it is pointed out that, in order "to become eligible under the Code, such names must be reinforced by adoption or acceptance by the author publishing" the reprint or other later work containing the names in question.

2. In considering the status of the name *Cancer arenarius* as

¹⁵ See paragraph 2 of NOTE 1 to *Opinion* 6 (p. 132 above).

¹⁶ See page 132 above.

¹⁷ See page 118 above.

¹⁸ See pp. 115-126 above.

used in the edition of Catesby's *Natural History of Carolina*, etc., published by George Edwards in 1771, the International Commission on Zoological Nomenclature accordingly applied (in *Opinion* 13) the criteria laid down in *Opinion* 5. As the result of this consideration, the Commission reached the conclusion (paragraph 5) that the names in the Edwards edition of Catesby did not comply with the conditions laid down in *Opinion* 5 and in consequence were not available under the Code.

3. It should be noted that the question of the status of names published in 1771 by Edwards in his edition of Catesby's *Natural History of Carolina* was again brought before the International Commission in 1922,¹⁹ when Commissioner David Starr Jordan included it in a list of zoological works, which he suggested should be suppressed by the Commission under their plenary powers, on the ground that the strict application of the rules in their case would clearly result in greater confusion than uniformity. This proposal was adopted by the Commission as regards the Edwards edition of Catesby, except for the concordance of the names used by Catesby with those applicable to the species concerned according to the Linnean system given by Edwards in volume 2 under the title: "A Catalogue of the Animals and Plants represented in Catesby's *Natural History of Carolina*: With the Linnaean Names." This decision was embodied in *Opinion* 89 published on 16th December 1925.²⁰

4. The concordance of names referred to above is the document from which an extract relating to the Class Crustacea was quoted by Miss Rathbun in her petition to the Commission in regard to the case dealt with in *Opinion* 13.²¹

5. So far as concerns the Edwards edition of Catesby, the effect of *Opinion* 89 is:—

- (i) to suppress nomenclatorially all new names included in the Edwards edition, in so far as such names were used by Catesby in the original (pre-1758) edition of his *Natural History of Carolina*; and
- (ii) to leave unaffected the status of names formed in accordance with the Linnean system and used by Edwards in the concordance given by him in volume 2 of his edition of Catesby.

¹⁹ The original of Commissioner D. S. Jordan's application is dated 7th July 1922. It is included among the papers relating to *Opinion* 89 in Volume 3 of bound correspondence relating to *Opinions* preserved in the archives of the International Commission.

²⁰ See 1925, *Smithson. misc. Coll.* 73 (No. 3) : 27–33.

²¹ See paragraph 1 of *Opinion* 13 (pp. 209–211 above).

6. Reference to the extract from Edwards' concordance quoted by Miss Rathbun²¹ shows that the name formed in accordance with the Linnean system which Edwards applied to the " Sand Crab " was *Cancer vocans* Linnaeus, 1758. In the opposite column, he cited the name *Cancer arenarius* but he did this merely to show that this was the name applied to that species by Catesby. Accordingly, the name *Cancer arenarius* of Catesby, as reprinted by Edwards in 1771, is suppressed for nomenclatorial purposes by *Opinion* 89.

7. To sum up: The Commission in *Opinion* 13 declared that new names published by Edwards in 1771 in his edition of Catesby's *Natural History of Carolina* were ineligible for consideration under the Code because those names did not satisfy the requirements of Article 25 as defined by *Opinion* 5; later in *Opinion* 89, the Commission went further and under their plenary powers suppressed for nomenclatorial purposes the whole of the Edwards edition of Catesby, with the exception of the names formed in accordance with the Linnean system added by Edwards in the concordance. In view of *Opinion* 13, *Opinion* 89 was unnecessary so far as concerns the Edwards edition of Catesby, and, if the petition on which the last-named *Opinion* was based had been solely concerned with the Edwards edition, the Commission would no doubt have thought it sufficient, in *Opinion* 89, to refer the petitioner to *Opinion* 13. In fact, however, the Edwards edition of Catesby was only one of a number of works which the Commission were then asked to suppress under their plenary powers and they accordingly took the line that their simplest course was to accept the proposal submitted to them in regard to this work, since in effect it did no more than reaffirm the decision which they had already taken in *Opinion* 13.

NOTE 4.

On the amendment of Article 26 of the International Code adopted by the Eleventh International Congress of Zoology at Padua in 1930.

In paragraph 2 of *Opinion* 13, the Commission quoted the second sentence of (the English translation of) Article 26 of the *Règles Internationales* as follows:—

The date of 1758, therefore, is accepted as the starting point of zoological nomenclature and of the Law of Priority.

2. At the time when *Opinion* 13 was adopted (i.e. in the period

1908-1910²²), the extract quoted above was perfectly correct. It should be noted, however, that at their meeting held at Padua in 1930 the Eleventh International Congress of Zoology approved a slight modification of the second sentence of Article 26 of the *Règles*. That sentence, as so amended, reads as follows :—

For practical purposes the date 1st January 1758 is accepted in these rules as the starting point of zoological nomenclature and of the Law of Priority.²³

3. The change made in Article 26 at Padua does no more than state in rather more precise terms the meaning intended to be conveyed by the previous wording of that Article, but attention is here drawn to the amended wording, in order to obviate the risk that a person reading paragraph 2 of *Opinion* 13 might fall into the error of supposing that the extract from Article 26 there quoted represents correctly the text of that Article at the present time.

4. The drafting amendment of Article 26 discussed above in no way detracts from the force of, or otherwise affects, the argument based on that Article by the International Commission on Zoological Nomenclature in paragraphs 2 and 3 of their *Opinion* 13.

NOTE 5.

On the limited and, in part, conditional, character of the decision given by the International Commission on Zoological Nomenclature in Opinion 13.

Opinion 13 is only the second of the *Opinions* in which the International Commission on Zoological Nomenclature gave a decision in regard to the status of a particular name. This *Opinion* differs from *Opinion* 12, the only previous *Opinion* dealing with a particular name, by reason of the fact that, unlike the question discussed in *Opinion* 12 (where only one issue was involved and only one of two answers could have been given), the problem dealt with in *Opinion* 13 is a complex of independent questions. Accordingly, with the limited resources then at their disposal, the International Commission decided to deal expressly in *Opinion* 13 only with the one problem which had been specifically submitted to them for decision, namely: "Is the name *Cancer arenarius* Catesby, 1771, *Natural History of Carolina*

²² See paragraph 2 of NOTE 1 (page 212 above).

²³ For a more detailed discussion of the original and amended texts of Article 26, see NOTE 3 to *Opinion* 3 (pp. 98-100 above).

(Edwards' edition), a nomenclatorially available name? " After giving a definite answer to this question, the Commission did, however, add certain observations regarding the correct scientific name of the Sand Crab. These observations, the Commission expressly stated, were not based upon a first-hand examination of the facts of the case but were merely conclusions drawn from the premises submitted by the petitioner in this case. These observations by the Commission represent, therefore, no more than hypothetical conclusions, the validity of which rests entirely upon the accuracy of the premises which were submitted by the petitioner but which were not verified by the Commission. The conclusions embodied in this part of *Opinion 13* are, therefore, purely conditional in character.

2. It must be noted, therefore, that in *Opinion 13* the International Commission on Zoological Nomenclature did no more, as regards the name of the Sand Crab, than :—

- (i) decide that the name *Cancer arenarius* as published in 1771 in Edwards' edition of Catesby's *Natural History of Carolina* is not a nomenclatorially available name;
- (ii) take note that, according to the premises submitted by the petitioner, the next name for the Sand Crab was *Cancer quadratus* Fabricius, 1793;²⁴
- (iii) take note that, according to the premises submitted by the petitioner, the name *Cancer quadratus* Fabricius, 1793,²⁴ was not available nomenclatorially, owing to the fact that the name *Cancer quadratus* had previously been published by some other author as the specific name of some other species;
- (iv) take note that, according to the premises submitted by the petitioner, the next published scientific name for the Sand Crab after *Cancer quadratus* Fabricius, 1793,²⁴ was *Ocypoda albicans* Bosc, 1802;²⁵
- (v) draw the conclusion that, if the premises submitted by the petitioner as set out in (ii), (iii) and (iv) above were correct, the oldest available scientific name for the Sand Crab would be *Ocypoda albicans* Bosc, 1802.²⁵

²⁴ As pointed out in footnote 3 above, the name *Cancer quadratus* was first published by Fabricius in 1787 (in vol. 1 of the *Mantissa Ins.*) and not in 1793 (the date assigned to this name in the petition in *Opinion 13*).

²⁵ See footnote 4 above, where it is shown that the correct date for the name *Ocypoda albicans* Bosc is [1801–1802] and not 1802 (the date assigned to this name in *Opinion 13*).

NOTE 6.

On the earliest use of the binominal combination Cancer arenarius as the specific name of a species belonging to the Class Crustacea.

The object of the petition dealt with in *Opinion 13* was to obtain from the International Commission on Zoological Nomenclature a ruling on the correct specific name of the Sand Crab. The problem in regard to the question on which the petitioner was in doubt (and on which a specific ruling was therefore asked for) was whether the name *Cancer arenarius* applied to this species by Mark Catesby in his *Natural History of Carolina* in 1743 (*i.e.* prior to the starting-point of zoological nomenclature and the coming into operation of the Law of Priority) acquired any rights under the Law of Priority when republished by George Edwards in 1771 in his edition of Catesby's work.

2. This method of approach to the problem led to an important decision by the International Commission in regard to the status of names originally published by Catesby in 1743, when those names were republished by Edwards in 1771.

3. As a contribution to the problem of the correct name of the Sand Crab, the problem so submitted to, and answered by, the International Commission in *Opinion 13* is wholly irrelevant, since even if the names originally published by Catesby in 1743 had acquired rights under the Law of Priority on being republished by Edwards in 1771, the name *Cancer arenarius* Edwards in Catesby, 1771, would nevertheless have been invalid, since it would have been a homonym of the prior name *Cancer arenarius* Toreen, 1765, in Osbeck (P.), *Reise Ost-Ind. China* : 479.

4. Reference to Osbeck's *Reise* shows that the matter printed on pp. 431-514 was not written by Osbeck but consists of an appendix containing the text of letters written by Olof Toreen to Linnaeus. The full title of this Appendix is : " Eine ostindische Reise nach Suratte, China, etc. von 1750 den 1 April 1752 den 26 Jun. verrichtet von Olof Toreen Schiffsprediger der ostindischen Compagnie. In Briefen an den Herrn Archiater von Linné." Toreen, as these letters show, was a strictly binominal author. This is as might be expected in view of the fact that his letters were actually addressed to Linnaeus.

5. The following is the passage on page 479 in which Toreen introduced the name *Cancer arenarius* :—

In dem Meere giebt es, ausser mancherley Fischen, auch verschiedene Krabbenarten. Wenn eine derselben, welche ihre Augen auf langen

Stiften trug und besondere Füße hatte (*Cancer arenarius*), indem sie Ihnen von dem Herrn Commerzienrathe Lagerström übersendet worden, Schaden genommen hätte, würde ich es bedauern. In ihren Leben funkelten ihre Augen trotz einem Katzenauge.

6. The heading of the page on which the above passage is printed is "Queda, 1751." On a previous page the locality so indicated is given more fully as "Queda in der Strasse von Malacca."

7. The locality cited by Toreen as the place where he obtained the specimens of the species to which he applied the name *Cancer arenarius* is important as proving conclusively (quite apart from the evidence supplied by the brief description) that the species *Cancer arenarius* Toreen is not the Sand Crab, since that species "is restricted in its range to the Atlantic shores of the American Continent (from Rhode Island to Santa Catharina, Brazil)" (Dr. I. Gordon, Assistant Keeper, Department of Zoology, British Museum (Natural History) *in litt.*, dated 15th March 1945).

8. The question whether the descriptive matter given by Toreen in respect of the species *Cancer arenarius* Toreen is sufficient to permit of the identification of that species is a systematic and not a nomenclatorial problem. From the nomenclatorial point of view, it is a matter of complete indifference whether the species *Cancer arenarius* Toreen can be identified or not. In the latter case the name *Cancer arenarius* Toreen, 1765, becomes a *nomen dubium*, but in either case the name *Cancer arenarius* Toreen possesses rights under the Law of Priority as from 1765, the date on which it was published. Accordingly, any binominal combination consisting of the words "*Cancer arenarius*" published after 1765 as the name of any other species is automatically invalid, by reason of being a homonym under Article 35 of the *Règles Internationales*.

NOTE 7.

On the nomenclatorial status of scientific names first appearing in print in Meuschen (F. C.), 1778, Museum Gronovianum.

One of the assumptions made in the statement of the case on which Opinion 13 was based²⁶ was the assumption that *Cancer quadratus* Fabricius, 1793, was invalid because it was pre-occupied, *i.e.* because it was invalid as a homonym under Article 35 of the *Règles Internationales*. The petitioner did not specify the name

²⁶ See paragraph 2(iii) of NOTE 5 above (p. 217).

of the author by whom, it was alleged, the binominal combination "*Cancer quadratus*" had been published as a new specific name for some species of the Class Crustacea prior to its being published in 1793 as the specific name for the Sand Crab. Leaving aside the fact that both the "statement of the case" and *Opinion* 13 itself were in error in attributing the name *Cancer quadratus* to Fabricius as from 1793, since that name was in fact first published by Fabricius as the name of the Sand Crab in 1787,²⁷ the position, as disclosed by Sherborn, 1902, *Index Anim.* Pars Prima: 805 (published eight years before *Opinion* 13), is that the binominal combination *Cancer quadrata* appeared in print on one occasion prior to 1787 (the date on which Fabricius first published the name *Cancer quadratus* as the specific name of the Sand Crab). The author by whom the name *Cancer quadrata* was so used was Friedrich Christian Meuschen, by whom it was introduced in 1778 on page 84 of a booklet usually known by the abbreviated title "*Museum Gronovianum*."

2. Meuschen's *Museum Gronovianum* is an extremely scarce work, the only copy of which that is known to me being that in the library of the British Museum (Bloomsbury). Through the courtesy of the Trustees of the Museum, it is possible to give on plates 1 and 2 of the present edition of *Opinion* 13 facsimiles of pages 84 and 94 of this rare booklet. Page 84 is the page on which the name *Cancer quadrata* appears and the two pages taken together illustrate very well the character of Meuschen's *Museum Gronovianum* and the system of nomenclature used in it.

3. The full title of Meuschen's *Museum Gronovianum* is as follows:—

MUSEUM GRONOVIANUM. // SIVE // INDEX // RERUM NATURAL-
IUM // TAM // MAMMALIUM AMPHIBIORVM PISCIVM INSEC- //
TORUM CONCHYLIIORVM ZOOPHYTORVM // PLANTARVM ET
MINERALIVM // EXQVISITISSIMORVM // QUAM // ARTE FAC-
TARVM NONNVLLARVM. // INTER QVAE EMINET // HERBARIVS
SICCVS PLANTARVM // A TOVRNEFORTIO CLAITONIO LINNAEO
// ALIISQVE BOTANICIS COLLECTARVM. // QVAE OMNIA MVLT-
A CVRA ET MAGNIS // SVMPTIBUS SIBI COMPARAVIT // VIR AM-
PLISSIMVS & CELEBERRIMVS // LAVR. THEOD. GRONOVIVS //
J. V. D. // CIVITATIS LUGDUNO BATAVAE SENATOR ET //
SCABINVS SOCIETATIS REGIAE LONDINENSIS // BASILAEENSIS
ET HOLLANDIAE QVAE // HARLEMI EST ALIORVMQVE // SOCIVS
&c. &c. // Quae publice subhasta dictrahentur in aedibus // Defuncti //
Ad diem Mercurii 7. Octobris & seqq. 1778. // Diebus 1. & 2. Octobris
Museum patebit. // LUGDVNI BATAVORVM // Apud TH. HAAK &

²⁷ For the reference to the work in which in 1787 Fabricius first bestowed the name *Cancer quadratus* upon the Sand Crab and to the work in which in 1793 he again included the Sand Crab under that name, see footnote 3.

SOCIOS, nec non // J. MEERBVRG, Bibliopolas. 1778. // Vbi Catalogi distribuuntur pro 6. Stufferis.

4. Meuschen's *Museum Gronovianum* is a small quarto volume, the collation of which is as follows :—

I-VI, I-231-[232]-I unnumbered page (recto advertisements, verso blank).

5. As the title shows, Meuschen's *Museum Gronovianum* is a Catalogue of the zoological, botanical and mineral collections formed by Laurentius Theodorus Gronovius prepared for sale by auction (*subhasta*) in October 1778, the year following Gronovius's death.

6. In Meuschen's Catalogue the Gronovius collection is arranged in 2861 lots. These lots are arranged in a rough systematic order, the first lots consisting of specimens of the Class Mammalia ("Quadrupedia"). At the end of the description of each lot, the number of specimens comprised in the lot is indicated. This is done by means of such expressions as "2 stuks" (as in lots 786 and 787²⁸), "Een doublet" (as in lot 867²⁹) and "Twee doubletten" (as in lots 874 and 877²⁹).

7. In some cases the first word in the description of the lot is the generic name (in small capitals) (for example, the name "CANCER" in lots 786 to 791²⁸) of the one or more species included in that lot. In other cases, the first word in the description of the lot is the specific trivial name (not necessarily binominal in form) of the species (one or more in number) included in the lot. In the latter class of case the name of the genus to which the species concerned were attributed is ascertainable only from the generic names—cited in the nominative plural—placed as a cross-heading above the description of the first lot comprising species attributed to that genus. For example, lots 868 to 874²⁹ comprise species attributed to the genus *Solen*, as is indicated by the word "SOLENES" (in capitals) which appears as a cross-heading above the description of lot 868,²⁹ the first of the lots concerned.

8. Certain of the lots contained specimens of only one species, as [*Solen*] *Siliqua* (lot 869²⁹) and [*Solen*] *Anatinus* (lot 873). In other cases, specimens of the same species were included in two successive lots. For example, both lot 870 and lot 871 contained only specimens of the species referred to under the (non-binominal) name [*Solen*] *Radiatus violaceus*.²⁹

9. In a considerable number of cases specimens of several

²⁸ See plate 1.

²⁹ See plate 2.

distinct species were included in a single lot. For example, in the portion of the Catalogue containing specimens of the Order Lepidoptera (Class Insecta) lot 699 contained specimens of four common and very distinct species of the Family PIERIDAE, namely:—*Papilio rapae* Linnaeus, 1758 (*Pieris rapae* (Linnaeus, 1758)), (ii) *Papilio crataegi* Linnaeus, 1758 (*Aporia crataegi* (Linnaeus, 1758)), (iii) *Papilio brassicae* Linnaeus, 1758 (*Pieris brassicae* (Linnaeus, 1758)), and (iv) *Papilio napi* Linnaeus, 1758 (*Pieris napi* (Linnaeus, 1758)). The method adopted by Meuschen in lot 699 for enumerating the specimens of these four species in the Gronovius collection was as follows:—

699 *Rapae, Crataegi, Brassicae, Napi*; Geëdert groot Witje, gepuncteert Witje, groot Witje, geëdert klein Witje. Gr. Z. II. n. 746-749. 751, L. sp. 72, 75, 76, 77. E. 6 stuks.

10. The lot in which the specific trivial name "*quadrata*" was applied to a species of the genus "*Cancer*" is lot 789, which is described on page 84 of Meuschen's *Museum Gronovianum*.³⁰ The first name cited is "*CANCER granulatus*" and this is followed by three other names, separated from one another by commas. These names are (i) "*Arenaria*," (ii) "*minutus? Quadrata*," (iii) "*Variolata*." Next come four vernacular names, referring (presumably) to the four species for which Latin names had just been given. These are followed by short Latin diagnoses for the species already referred to as "*Arenaria*" and "*Quadrata*" respectively. Each of these diagnoses is preceded by a number (in the first case "960" and in the second "963"), which refer to the non-binominal work published by Gronovius under the title *Zoophylacium Gronovianum*, a work which has been suppressed for all nomenclatorial purposes by the International Commission on Zoological Nomenclature acting under their plenary powers (*Opinion* 89, published in 1925). The entry for lot 789 concludes with further references to the *Zoophylacium Gronovianum* and an indication of the number of specimens to be sold as "6 stuks."

11. The examples cited in the preceding paragraphs show that Meuschen's *Museum Gronovianum* displays a complete lack of consistency in the presentation of the names of the species enumerated in that Catalogue. In some cases the trivial names of species are preceded by a generic name in the nominative singular; in others no generic name is cited for the species concerned, the only indication of the name of the group or genus to which the species are referred being given by occasional cross-headings

³⁰ See plate 1.

consisting either of a single word in the nominative plural (as *Quadrupedia*, *Solenes*, etc.) or of two words also in the nominative plural (as "*Cancri Monoculi*" on page 83). Again, some lots are confined to a single species, while others include two or more specific trivial names, no indication being given to show whether Meuschen regarded each name cited as being the name of one of the species comprised in the lot (as he certainly did in the case of lot 699³¹) or whether he considered some of these names as synonyms of other names previously enumerated in the description of the contents of the lot concerned.

12. The system of nomenclature followed by Meuschen in the *Museum Gronovianum* is naturally the system of nomenclature employed by Gronovius, since Meuschen's booklet is no more than a sale Catalogue of the Gronovius collection. It is probable indeed that the names, diagnoses, and references given by Meuschen in his Catalogue represent no more than the transcription of the labels written by Gronovius himself for the explanation and display of his collection. Accordingly, as was to be expected, the system of nomenclature employed by Meuschen in his *Museum Gronovianum* is identical with that employed fifteen years earlier by Gronovius in his *Zoophylacium Gronovianum*, that is to say: Meuschen, like Gronovius, recognised the concept of the genus (for example, *Cancer*, *Papilio*, etc.) and grouped in each genus those species which he regarded as falling within the generic definition. Within each genus Meuschen (like Gronovius) cited species sometimes under a single specific trivial name (in most cases specific trivial names given by Linnaeus in the *Syst. Nat.*), sometimes under polyverbal specific trivial names of the type habitually used in zoological works prior to the introduction of the binominal system of nomenclature by Linnaeus in 1758.

13. In the period 1907-10 the International Commission on Zoological Nomenclature gave express consideration to the status of new names published by Gronovius in 1763 in his *Zoophylacium Gronovianum*. In the *Opinion* (*Opinion* 20), in which the Commission delivered their conclusions in this matter, they stated that new generic names published by Gronovius in the *Zoophylacium Gronovianum* were available under the International Code, because the following two conditions were satisfied in that work:—
(i) Gronovius applied the principles of binary nomenclature³²

³¹ See paragraph 9 above.

³² There are two possible interpretations of the expression "nomenclature binaire" (binary nomenclature) as used in proviso (b) to Article 25 of the *Règles Internationales*. This expression may have the meaning

as required by proviso (b) to Article 25, because in the *Zoophylacium Gronovianum* Gronovius named "two units or things, genera and species"; (ii) Gronovius used a uninominal (*i.e.* univocal) system of nomenclature for genera as required by Article 2 of the International Code. Nothing was said in *Opinion* 20 regarding the status of new specific trivial names published by Gronovius in the *Zoophylacium Gronovianum*, but the criteria applied by the Commission in that *Opinion* in determining the question whether the generic names first published in that work are available under the *Règles Internationales* must apply also to the question whether new specific trivial names first published on that occasion are so available. In the case of generic names, the Commission guided themselves by Article 25 (as regards the nature of the system of nomenclature employed) and Article 2 (as regards the application by Gronovius of that system to a particular class of name, *i.e.* to generic names). Accordingly, these two criteria apply also to the new specific trivial names published by Gronovius in the *Zoophylacium Gronovianum*. Gronovius's specific

attached to it by the International Commission on Zoological Nomenclature in *Opinion* 20 (quoted in paragraph 13 above) or it may have a narrower meaning and be no more than a synonym of the expression "nomenclature binominale" (binominal nomenclature). In view of a discussion which occurred at the meeting of the Section on Nomenclature of the Eleventh International Congress of Zoology held at Padua in 1930, the question of the meaning correctly to be applied to the expression "nomenclature binaire" was considered by the Permanent Committee of the International Zoological Congresses at Lisbon in 1935 during the sittings of the Twelfth International Congress of Zoology. On the recommendation of the Permanent Committee and with the concurrence of the International Commission on Zoological Nomenclature, it was then agreed by the Twelfth International Congress of Zoology in Concilium Plenum that the whole question should form the subject of a special investigation by the International Commission, by whom a report on the whole matter should be submitted at the next (Thirteenth) International Congress of Zoology. The question of the meaning of the expression "nomenclature binaire" as used in the *Règles Internationales* is, therefore, at present *sub judice*. This fact does not, however, affect in any way the question of the status of new specific trivial names first appearing in Meuschen's *Museum Gronovianum*, since quite clearly those names possess no rights under the Law of Priority if the expression "nomenclature binaire" is the exact equivalent of the expression "nomenclature binominale." The only question to be considered in this connection is, therefore, whether the new specific trivial names used by Meuschen in the *Museum Gronovianum* are formed in accordance with the principles of "nomenclature binaire," if that expression is interpreted in the wider sense embodied in the Commission's *Opinion* 20. This is the question discussed in paragraph 13 above, where it is shown that even on this broader interpretation of the expression "nomenclature binaire" the new specific trivial names used in the *Museum Gronovianum* fail to satisfy the requirements of proviso (b) to Article 25 of the *Règles Internationales*.

trivial names clearly satisfy proviso (b) to Article 25 to precisely the same extent as do his generic names. When, however, his specific trivial names are examined in relation to Article 2, it is found that some are binominal combinations as required by that Article, while others are of the polyverbal type prevalent prior to 1758. Both types of name were regarded by Gronovius as equally proper. While, therefore, Gronovius applied the principles of binary nomenclature as defined by *Opinion* 20, he did not follow for species a binominal system of nomenclature as required by Article 2. Accordingly, new specific trivial names published by Gronovius in the *Zoophylacium Gronovianum*, unlike new generic names published in that work, are not available under the *Règles Internationales* and have, therefore, no status under the Law of Priority as from the date of being so published. Since, as already pointed out, the system of nomenclature employed by Meuschen in 1778 in the *Museum Gronovianum* is identical with that employed by Gronovius himself in 1763 in his *Zoophylacium Gronovianum*, no new specific trivial name used by Meuschen in the first-named work has any status under the Law of Priority as from the date (1778), on which it was so used.

14. Quite apart from the question whether in the *Museum Gronovianum* Meuschen applied the principles of binary nomenclature, it is necessary to consider whether that work was ever published ("divulgué dans une publication"³³) within the meaning of Article 25 of the *Règles Internationales*. The exact meaning to be attached to the expression "divulgué dans une publication" as used in Article 25 has never been clearly defined, although the question has been under consideration by the International Commission on Zoological Nomenclature for some years and clearly should be taken up again by the Commission after the end of the war. In the meanwhile, it must be noted that a start was made in the clarification of this problem in *Opinion* 15 of the Commission, published in 1910. In that *Opinion* the Commission laid it down that "Publication, in the sense of the Code, consists in the public issue of printed matter." This decision was re-affirmed in *Opinion* 51 (published in 1912), when the Commission added the explanation that "the qualifying word 'public' in this definition [*i.e.* in the definition given in *Opinion*

³³ The only substantive text of the *Règles Internationales* (the International Code) is the French text, the English, German and Italian texts being no more than translations of the substantive (French) text. The expression here quoted is the expression used in the substantive text of Article 25.

15] indicates that the printed matter in question is not intended for special persons only or for a limited time, but that it is given to the world, or used in the nature of a permanent scientific record."

15. On the basis of the foregoing definition of the meaning to be applied to the expression "divulgué dans une publication," the International Commission decided (in *Opinion* 51) that the sale catalogue of the collection of shells made by de Calonne, usually known as the *Museum Calonnianum*, was not published within the meaning of Article 25 of the *Règles Internationales* and therefore that new names included in it possessed no rights under the Law of Priority. Meuschen's *Museum Gronovianum* resembles the *Museum Calonnianum* in all relevant respects: it is a sale catalogue of the collection of the deceased collector; the nomenclature used in it is based upon the nomenclature used by the deceased collector; it was intended for special persons only (*i.e.* prospective purchasers of portions of the collection); it was intended for use only during a limited time (*i.e.* during the period immediately preceding the sale of the collection and during the actual period of the sale); it was not "given to the world as a permanent scientific record." In view, therefore, of *Opinion* 51, it is clear that Meuschen's *Museum Gronovianum* (like the *Museum Calonnianum*) was not "divulgué dans une publication" in the sense in which that expression is used in Article 25 of the *Règles Internationales*. It follows that no new name (whether a generic name or a specific trivial name), which first appeared in the *Museum Gronovianum*, possesses any rights under the Law of Priority as from the date (1778) of such appearance.

16. The position as regards Meuschen's *Museum Gronovianum* may be summarised as follows:—

- (1) Whichever may ultimately be found to be the correct meaning of the expression "nomenclature binaire" ³³ as used in proviso (b) to Article 25 of the *Règles Internationales*, ³⁴ no specific trivial name which first appeared in Meuschen's *Museum Gronovianum* possesses any rights under the Law of Priority as from the date (1778) of such appearance, since even under the wider of the two possible interpretations of the above expression (*i.e.* the interpretation embodied in *Opinion* 20), those names do not satisfy the requirements of Articles 2 and 25 of the *Règles Internationales*, when read together as required by *Opinion* 20.

³⁴ See footnote 32.

- (2) Even if the specific trivial names used by Meuschen in the *Museum Gronovianum* had throughout been formed in the strictest binominal form, they would nevertheless have possessed no rights under the Law of Priority, since Meuschen's *Museum Gronovianum* was not published ("divulgué dans une publication") in the manner required by Article 25 of the *Règles Internationales*.

NOTE 8.

On certain errors in the conclusions embodied in Opinion 13, consequent upon the conditional acceptance for the purposes thereof of the premises submitted by the petitioner now found to be erroneous and incomplete.

As has been shown in NOTE 5 above,³⁵ the conclusion that the name *Ocypoda albicans* Bosc, [1801-1802], is the oldest available name for the Sand Crab, which was conditionally accepted in the latter part of the "summary" of (i.e. the decision in) *Opinion 13* was based upon:—

- (1) the decision then taken by the International Commission that the name *Cancer arenarius*³⁶ as published in 1771 by Edwards in his edition of Catesby's *Natural History of Carolina* is not a nomenclatorially available name;
- (2) the unverified assumption that each of the following propositions contained in the petitioner's "statement of the case" was correct and in accordance with the facts in all respects:—
 - (a) that the next name bestowed upon the Sand Crab after the publication in 1771 of the name *Cancer arenarius* by Edwards in Catesby was *Cancer quadratus* Fabricius, 1793;³⁷
 - (b) that the name *Cancer quadratus* Fabricius, 1793, was not available for the Sand Crab, because that binominal combination had previously been published

³⁵ See pp. 216-217 above.

³⁶ The component of the specific name *Cancer arenarius* consisting of the generic name *Cancer* was omitted from the summary when *Opinion 13* was first published. See footnote 1.

³⁷ The component of the specific name *Cancer quadratus* consisting of the generic name *Cancer* was omitted from the summary when *Opinion 13* was first published. The correct date of this name is 1787. See footnote 3.

by some other (unspecified) author for some other species;

- (c) that, if both the name *Cancer arenarius* Edwards, 1771, and the name *Cancer quadratus* Fabricius, 1793, were unavailable nomenclatorially, the first available name bestowed upon the Sand Crab was *Ocypoda albicans* Bosc, 1802.³⁸

2. The preliminary decision referred to in paragraph 1(1) above is important, since it provides an authoritative guide to the nomenclatorial status of names first published in 1771 in Edwards' edition of Catesby's *Natural History of Carolina*, but this decision is irrelevant to the problem of the name of the Sand Crab, since, even if the names first published by Edwards in Catesby, 1771, were available nomenclatorially, the name *Cancer arenarius* Edwards, 1771 (the only one of those names which is involved in the problem of the name of the Sand Crab) would nevertheless be unavailable for the Sand Crab, for (as shown in NOTE 6 above³⁹) the name *Cancer arenarius* Edwards, 1771, would have been a homonym of the name *Cancer arenarius* Toreen, 1765, previously given to an entirely different species.

3. Proposition (a) (enumerated in paragraph 1(2) above) is correct, except that it was in 1787 in volume 1 of the *Mantissa Insectorum* and not in 1793 in the *Entomologia systematica* that Fabricius first published the name *Cancer quadratus* as the specific name for the Sand Crab.

4. Proposition (b) (enumerated in paragraph 1(2) above) is incorrect, since (as shown in NOTE 7 above⁴⁰) *Cancer quadrata* Meuschen, 1778, the only known name consisting of this binominal combination which is of older date than *Cancer quadratus* Fabricius, 1787, is a name which possesses no rights under the Law of Priority and cannot, therefore, pre-occupy (and invalidate) the name *Cancer quadratus* Fabricius, 1787, as the name of the Sand Crab. The name given by Fabricius to the Sand Crab is, therefore, the oldest available for that species.

5. Proposition (c) (enumerated in paragraph 1(2) above) remains true, but, in view of the fact that, contrary to the statement in

³⁸ The component of the specific name *Ocypoda albicans* consisting of the generic name *Ocypoda* was omitted from the summary when *Opinion 13* was first published. The correct date of this name is [1801-1802]. See footnote 4.

³⁹ See pp. 218-219 above.

⁴⁰ See pp. 219-227 above.

proposition (b), the name *Cancer quadratus* Fabricius, 1787, is the oldest available name for the Sand Crab, proposition (c) is now seen to be completely irrelevant to the consideration of the name of that species.

6. In the light of the evidence summarised above, the position as regards the conclusions embodied in *Opinion 13* is seen to be as follows :—

- (1) The first sentence in the "summary" ("Catesby's (1743) pre-Linnean name *Cancer*⁴¹ *arenarius* is not available under the Code, although 'reprinted' in 1771;") contains an important ruling by the International Commission on the nomenclatorial status of the edition of Catesby, 1743, *Natural History of Carolina*, published by Edwards in 1771. This decision has no bearing, however, upon the question of the correct scientific name of the Sand Crab, since even if the Edwards edition of Catesby was a nomenclatorially available work, the name *Cancer arenarius* Edwards, 1771, would not be available as the name of the Sand Crab, since it would be a homonym of the older name *Cancer arenarius* Toreen, 1765 (see paragraph 2).
- (2) The second sentence in the "summary" ("*Cancer*⁴² *quadratus* Fabricius, 1793,⁴³ is stated to be pre-occupied;") is based upon a statement in the premises submitted by the petitioner, which is now seen to be incorrect (see paragraphs 3 & 4).
- (3) The third sentence in the "summary" ("*Ocyropa*⁴⁴ *albicans* Bosc, 1802,⁴⁵ being the next specific name in the list becomes valid, under the premises submitted.") remains true as a deduction from the premises submitted by the petitioner, but, in view of the fact that (as shown in (2) above) those premises were fallacious, the statement in the third sentence of the "summary" is now seen to be completely misleading as a guide to the nomenclature of the Sand Crab. The name *Ocyropa albicans* Bosc, [1801–1802], is not the oldest available name for the Sand Crab; it is

⁴¹ See footnote 1.

⁴² See footnote 3.

⁴³ The date of this name is 1787 not 1793, the date cited in the "summary" of *Opinion 13* when originally published. See footnote 3.

⁴⁴ See footnote 4.

⁴⁵ This name was published in "An X" and should therefore be dated 1801–1802 and cited in square brackets. The date was incorrectly given as 1802 in the "summary" of *Opinion 13* when originally published.

- * only a synonym of the available name *Cancer quadratus* Fabricius, 1787 (see paragraphs 4 & 5).

7. In view of the fact that the statements in the second and third sentences of the "summary" of *Opinion* 13 are completely misleading, being based upon incorrect premises submitted by the petitioner, it is clearly impossible for the International Commission to leave matters where they now stand. The question dealt with in *Opinion* 13 is, therefore, at once being submitted to the International Commission for further consideration.

8. The decision by the Commission in *Opinion* 13 regarding the nomenclatorial status of the edition of Catesby's *Natural History of Carolina* has been shown (paragraphs 2 and 6(1) above) to be completely irrelevant to the problem of the name of the Sand Crab. It can, therefore, logically find no place in a revised *Opinion* regarding the name of the Sand Crab. It represents, however, a decision by the International Commission on an important question of principle and clearly should be retained on permanent record in some suitable form. In this connection, it should be recalled that at their Session held at Lisbon in 1935 the International Commission on Zoological Nomenclature unanimously agreed that, "when the Commission reached a decision of interest to the general body of zoologists, it was of the greatest importance that that decision should be presented in such a way as to ensure that it was most readily available to all concerned" (Lisbon Session, 4th Meeting, Conclusion 15).⁴⁶ It is accordingly proposed that in the action now to be taken by the International Commission the problem of the status of the Edwards edition of Catesby's *Natural History of Carolina* and the problem of the name of the Sand Crab should be dealt with in different *Opinions*. In order to deal with the question of the name of the Sand Crab, it will be necessary for the International Commission formally to deal with the status of Meuschen's *Museum Gronovianum* of 1778 discussed in NOTE 7 above. As this, like the status of Catesby's names when republished by Edwards in 1771, raises a question of general interest and is not concerned only with the name of the Sand Crab, it is proposed that in accordance with the decision taken by the Commission at Lisbon as to the procedure to be followed in such cases a separate *Opinion* should be rendered by the Commission in regard to the status of Meuschen's *Museum Gronovianum* of 1778.

⁴⁶ See 1943, *Bull. zool. Nomencl.* 1: 40.

9. The action now proposed is, therefore, that the International Commission should :—

- (1) cancel *Opinion* 13;
- (2) render an *Opinion* confirming as follows the question of principle dealt with in the first sentence of *Opinion* 13;

“ The names published by Mark Catesby in 1743 in his *Natural History of Carolina* possess no status under the Law of Priority as from that date, since it is prior to 1758, the starting point of zoological nomenclature and the Law of Priority (Article 26 of the *Règles Internationales*); nor do those names acquire any rights under the Law of Priority as from 1771, the date on which they were republished by George Edwards in his edition of Catesby's *Natural History of Carolina*, since Catesby's names were not then ‘ re-inforced by adoption or acceptance ’ by Edwards and in consequence do not qualify for availability under the provisions of *Opinion* 5.”⁴⁷

- (3) render an *Opinion* as follows on the nomenclatorial status of Meuschen, 1778, *Museum Gronovianum* :—

“ The *Museum Gronovianum* by Friedrich Christian Meuschen issued in 1778 is a sale catalogue of the zoological, botanical and mineral collections formed by Laurentius Theodorus Gronovius, who had died in 1777. It was drawn up for special persons only (i.e. prospective purchasers) and was intended for use for only a limited time (i.e. during the period immediately preceding and during the sale); it was not given to the world or used in the nature of a permanent scientific record. None of the tests laid down in *Opinion* 51 as the criteria for determining whether a zoological work has been published (‘ divulgué dans une publication ’) within the meaning of Article 25 of the *Règles Internationales* is, therefore, satisfied by Meuschen's *Museum Gronovianum*. Accordingly, no name which first appeared in 1778 in Meuschen's *Museum Gronovianum* possesses any rights under the Law of Priority as from the date of such appearance.”

- (4) render an *Opinion* as follows in regard to the name of the Sand Crab :—

“ The name *Cancer arenarius* Edwards, 1771, in Catesby, *Natural History of Carolina*, is not available for the Sand Crab as from that date, (i) because, as has been decided in *Opinion* —,⁴⁸ Catesby's pre-1758 names acquired no rights under the Law of Priority on being re-published by Edwards in 1771, and (ii) because, even if Catesby's names had been available as from 1771, the name *Cancer arenarius* Edwards, 1771, would have been a homonym of the name *Cancer arenarius* Toreen, 1765. The oldest available name

⁴⁷ See pp. 115–126 above.

⁴⁸ The *Opinion* here referred to is the projected *Opinion*, which it is suggested in paragraph 9(2) should be issued for the purpose of re-stating and confirming the decision embodied in the first sentence of the “ summary ” of *Opinion* 13.

for the Sand Crab is *Cancer quadratus* Fabricius, 1787, of which name *Ocypoda albicans* Bosc, [1801-1802], is a synonym."

FRANCIS HEMMING

*Secretary to the International Commission
on Zoological Nomenclature*

Secretariat of the Commission,
at the British Museum (Natural History),
Cromwell Road, LONDON, S.W.7.

29th April, 1945

- Gr. Z. II. n. 958, L. g. 271. sp. 1, n. 953. 954, L. g. 270. sp. 23. I. en E. 5 stuks.
- 786 *CANCER Maenas*, *Pelagicus*; Eur. Strandkrab, Steekelkrab. Gr. Z. II. n. 955. 956, L. sp. 22 ? 19. E. 2 stuks.
- 787 *CANCER Pelagicus*, *Pagurus*; Strand-krab, Zee-krab. Gr. Z. II. n. 956. 967, L. sp. 19. 27. E. 2 stuks.
- 788 *CANCER Articulatus*, *Porcellina*, *Orbicularis*; Ruggeleede Krab, gencepe Krab, gewelvd Krab; (957. *Orbicularis*: iborace laevi latiusculo sabconvexo, marginibus anticis utrinque ferratis: pedibus natatorio-cursoriis. (*Articulatus*: iborace lateribus spinosis, cbelis supra muricatis, spinis sex apice nigris. Gr. Z. II. n. 958. 957, L. sp. 23 ? &c. 5 stuks.
- 789 *CANCER granulatus*, *Arenaria*, *minutus*? *Quadrata*, *Variolata*; Korrelige Krab, Zandkorrelige Krab, Vierkande Krab, Pokkige Krab. (960. *Arenaria*: iborace latiusculo convexo laevi, undique emarginato, postice contractiore pedes non contegente: manibus cristatis. (963. *Quadrata*: iborace quadrato, integerrimo, margine acutiusculo: manibus aequalibus minimis; pedibus compressis cursoriis. Gr. Z. II. n. 959. 960. 962. 963, L. sp. 26 ? 8 ? &c. I. 6 stuks.
- 790 *CANCER Rhombus*, *Vocans*, *Grapsus*; Vierhoekige Krab, Zand-Krab, Stompneus-Krab. (964. *Rhombus*: iborace lato quadrato laevi integerrimo: manibus inaequalibus, minimis: pedibus cursoriis compressis. Gr. Z. II. n. 964. 966, L. sp. 14. 53. &c. I. en E. 7 stuks.
- 791 *CANCER Longicornus*, *rubescens*, *spinosa*, *maculata*, *Corona Imperialis*; Langspriet-Krab, roodagtig Krabbetje, Hairig Krabbetje, roodgevlakte Krab, Keyzerskroon Krab. (970. *Spinosa*: bisfusus, iborace brevi, lato, mutico: manu altera majore, iborace angustiore, pedibus cursoriis longiore. (972. *Corona Imperialis*: iborace latiusculo rugoso, antice utrinque obsolete tribulo: manibus pedibusque aequalibus rugosis supra carinato-compressis, Seba III. Tab.

94

Testacea.

- 865 *Anatinus*, Eenden-Mossel; *Pictorum*, Verfhouder. Gr. Z. III. n. 1090. 1094, *L. sp.* 28. 258. Drie doubletten.
 866 *Anatinus*, Eenden-Mossel, *speciei varietas n.* 864. Twee doubletten; vry groot.
 867 *Vulsella*, Baardknyper. Gr. Z. III. n. 1095, *L. sp.* 31. Een doublet.

S O L E N E S.

- 868 *Vagina rubra*, Indische roode Goot. Gr. Z. III. n. 1096, *L. sp.* 33. Een doublet.
 869 *Siliqua*, Messehecht; *Ensis?* Suiker-Peultje. Gr. Z. III. n. 1097. 1098, *L. sp.* 34. 35. Twee doubletten.
 870 *Radiatus violaceus*, Blaauwe Zonnestraal. Gr. Z. III. n. 1099, *L. sp.* 38. Een doublet, vry groot.
 871 *Radiatus violaceus*, Blaauwe Zonnestraal. Gr. & *L. ut supra*. Twee doubletten, iets kleiner.
 872 *Strigilatus roseo fuscus*, roodachtige Bruine Zonnestraal. Gr. Z. III. n. 1100, *L. sp.* 39. Een doublet, vry groot en schoon.
 873 *Anatinus*, altoos lichtende Lantern. Gr. Z. III. n. 1101, *L. sp.* 40. Een doublet.
 874 *Vespertina*, Daalende Zonnestraal; *Strigilatus*, Gaapende Zonnestraal. Gr. Z. III. n. 1100. &c. *L. sp.* 39, *List. T.* 417. fig. 261, *d'Argenville T.* 22. fig. 1. Twee doubletten.

T E L L I N A E.

- 875 *Lingua Felis*, Katte-Tong. Gr. Z. III. n. 1002, *L. sp.* 45. Een doublet.
 876 *Scobinata*, Robbe-Tong, of Sagryne Tyger-Tong. *L. sp.* 64. Een doublet.
 877 *Virgata*, Roode Zonnestraal, gevoorend; *Glabra*, gladde Tong. Gr. Z. III. n. 1103 1104, *L. sp.* 46 &c. Twee doubletten.
 878 *Fragilis*, Kraakende; *Fucata*, Geblankette; *Glabra*, Gladde Tong. Gr. Z. III. n. 1105. 1106. 1104, *L. sp.*